1 3.7 HAZARDS AND HAZARDOUS MATERIALS

HAZARDS AND HAZARDOUS MATERIALS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		\boxtimes		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?				\boxtimes
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				\boxtimes

2 3.7.1 Environmental Setting

- 3 The presence of hazardous materials or other safety hazards at the Project site,
- 4 including accidental releases such as spills or emissions during deconstruction
- 5 activities, could affect residents, workers, and visitors within and adjacent to the site.

- 1 Transportation of hazardous materials for removal from the Project site could also
- 2 present hazards. Additionally, if the complete extraction of piles is not successful, they
- 3 would be cut off to a minimum depth of 2 feet below the mud line. Although unlikely, piles
- 4 embedded in the Carquinez Strait bottom may become exposed by erosion over time.
- 5 The Port Costa Wharf is located in the Carquinez Strait in Contra Costa County. The
- 6 Project site is composed of wooden wharf structure remnants, three deteriorated timber-
- 7 pile-supported wood beam/deck platforms/piers, two steel-pipe-pile and concrete-deck
- 8 mooring dolphins, two concrete-pile-supported wood-deck mooring platforms, and two
- 9 wood-pile dolphins. Additional miscellaneous concrete, metal, and timber debris was
- 10 observed along the shoreline.
- 11 A certified technician completed LBP and ACM surveys of the wharf structures in
- 12 February 2013 (see Appendix A). Results of the survey indicate that LBP is present on
- some wharf structures, but no ACM. Since LBP is present on the wharf, Phillips 66
- would retain a licensed lead abatement contractor to address LBP prior to the general
- 15 deconstruction of the wharf. An LBP Management Plan including health and safety
- 16 procedures would be prepared and included in the Project's Work Plan to protect
- 17 Project personnel working at the Project site. Other hazardous materials that likely exist
- 18 within the wharf remnants include: creosote-treated timber pilings, remnants of
- 19 equipment such as mercury switches, petroleum based residues, and hydraulic fluids.
- 20 Hazardous materials would also be used and generated during deconstruction activities.
- 21 All Project-associated hazardous materials would be removed from the Project site for
- 22 proper disposal.

23 3.7.2 Regulatory Setting

- 24 Federal and State laws and regulations pertaining to this issue area and relevant to the
- 25 Project are identified in Tables 1-2 and 3.7-1. Local goals, policies, and/or regulations
- applicable to this issue area are listed below.

Table 3.7-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Hazards and Hazardous Materials)

U.S.	Clean Water Act (CWA) (33 USC 1251 et seq.)	The CWA is comprehensive legislation (it generally includes reference to the Federal Water Pollution Control Act of 1972, its supplementation by the CWA of 1977, and amendments in 1981, 1987, and 1993) that seeks to protect the nation's water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S. (see below and in Section 3.8, Hydrology and Water Resources).
U.S.	California Toxics Rule (40 CFR 131)	In 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California. USEPA promulgated this rule based on the Administrator's determination that the numeric criteria are necessary in the State of California to protect human health and the environment. Under CWA section 303(c)(2)(B), the USEPA requires states to adopt numeric water quality criteria

Table 3.7-1. Federal and/or State Laws, Regulations, and Policies Potentially Applicable to the Project (Hazards and Hazardous Materials)

		for priority toxic pollutants for which the USEPA has issued criteria guidance, and the presence or discharge of which could reasonably be expected to interfere with maintaining designated uses. These Federal criteria are legally applicable in California for inland surface waters, enclosed bays, and estuaries.
U.S.	Hazardous Materials Transportation Act (HMTA) (49 USC 5901)	The HMTA delegates authority to the DOT to develop and implement regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. Additionally, the USEPA's Hazardous Waste Manifest System is a set of forms, reports, and procedures for tracking hazardous waste from a generator's site to the disposal site. Applicable Federal regulations are contained primarily in CFR Titles 40 and 49.
U.S.	National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300)	Authorized under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99 through 499; and by CWA section 311(d), as amended by the Oil Pollution Act of 1990 (OPA), Pub. L. 101 through 380. The NCP outlines requirements for responding to both oil spills and releases of hazardous substances. It specifies compliance, but does not require the preparation of a written plan. It also provides a comprehensive system for reporting, spill containment, and cleanup. The U.S. Coast Guard (USCG) and USEPA co-chair the National Response Team. In accordance with 40 CFR 300.175, the USCG has responsibility for oversight of regional response for oil spills in "coastal zones," as described in 40 CFR 300.120.
U.S.	Oil Pollution Act (OPA) (33 USC 2712)	The OPA requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances. The passage of the OPA motivated California to pass a more stringent spill response and recovery regulation and the creation of the Office of Spill Prevention and Response (OSPR) to review and regulate oil spill plans and contracts.
U.S.	Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.)	The RCRA authorizes the USEPA to control hazardous waste from "cradle-to-grave," which encompasses its generation, transportation, treatment, storage, and disposal. RCRA's Federal Hazardous and Solid Waste Amendments from 1984 include waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. The Department of Toxic Substances Control is the lead State agency for corrective action associated with RCRA facility investigations and remediation.
U.S.	Toxic Substances Control Act (TSCA) (15 USC 2601– 2692)	The TSCA authorizes the USEPA to require reporting, record-keeping, testing requirements, and restrictions related to chemical substances and/or mixtures. It also addresses production, importation, use, and disposal of specific chemicals, such as polychlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.
U.S.	Other	 Act of 1980 to Prevent Pollution from Ships requires ships in U.S. waters, and U.S. ships wherever located, to comply with International Convention for the Prevention of Pollution from Ships (MARPOL). Convention on the International Regulations for Preventing Collisions at Sea (COLREGS). These regulations establish "rules of the road" such as rights-ofway, safe speed, actions to avoid collision, and procedures to observe in narrow channels and restricted visibility. Inspection and Regulation of Vessels (46 USC Subtitle II Part B). Federal regulations for marine vessel shipping are codified in 46 CFR parts 1 through

Table 3.7-1. Federal and/or State Laws, Regulations, and Policies Potentially **Applicable to the Project (Hazards and Hazardous Materials)**

		599 and are implemented by the USCG, Maritime Administration, and Federal Maritime Commission. These regulations provide that all vessels operating offshore, including those under foreign registration, are subject to requirements applicable to vessel construction, condition, and operation. All vessels (including motorboats) operating in commercial service (e.g., passengers for hire, transport of cargoes, hazardous materials, and bulk solids) on specified routes (inland, near coastal, and oceans) are subject to requirements applicable to vessel construction, condition, and operation. These regulations also allow for inspections to verify that vessels comply with applicable international conventions and U.S. laws and regulations. • Navigation and Navigable Waters regulations (33 CFR) include requirements pertaining to prevention and control of releases of materials (including oil spills) from vessels, traffic control, and restricted areas, and general ports and waterways safety.
CA	Lempert- Keene- Seastrand Oil Spill Prevention and Response Act (Gov. Code § 8574.1 et seq.; Pub. Resources Code § 8750 et seq.)	This Act and its implementing regulations seek to protect State waters from oil pollution and to plan for the effective and immediate response, removal, abatement, and cleanup in the event of an oil spill. The Act requires vessel and marine facilities to have marine oil spill contingency plans and to demonstrate financial responsibility, and requires immediate cleanup of spills, following the approved contingency plans, and fully mitigating impacts on wildlife. The Act assigns primary authority to the Office of Spill Prevention and Response (OSPR) division within the CDFW to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in the marine waters of the State. The CSLC assists OSPR with spill investigations and response.
CA	Other	 California Clean Coast Act (SB 771) establishes limitations for shipboard incinerators, and the discharge of hazardous material—including oily bilgewater, graywater, and sewage—into State waters or a marine sanctuary. It also provides direction for submitting information on visiting vessels to the CSLC and reporting of discharges to the State water quality agencies. California Harbors and Navigation Code specifies a State policy to "promote safety for persons and property in and connected with the use and equipment of vessels," and includes laws concerning marine navigation that are implemented by local city and county governments. This Code also regulates discharges from vessels within territorial waters of the State of California to prevent adverse impacts on the marine environment. This Code regulates oil discharges and imposes civil penalties and liability for cleanup costs when oil is intentionally or negligently discharged to the State waters. California Seismic Hazards Mapping Act (Pub. Resources Code, § 2690) and Seismic Hazards Mapping Regulations (Cal. Code Regs., tit. 14, Div. 2, Ch. 8, Art. 10) (See Section 3.6, Geology and Soils). Hazardous Waste Control Act (Cal. Code Regs., tit. 26) defines requirements for proper management of hazardous materials. Porter-Cologne Water Quality Control Act (Cal. Water Code, § 13000 et seq.) (See Section 3.8, Hydrology and Water Quality).

- 1 Contra Costa County General Plan. The following goals and policies regarding
- 2 hazardous materials uses from the Contra Costa County General Plan (2005) were
- 3 considered in this analysis:

Safety Element

- Goal 10-I To provide public protection from hazards associated with use, transport, treatment, and disposal of hazardous substances.
- Policy 10-61 Hazardous waste releases from both private companies and from public agencies shall be identified and eliminated.
- Policy 10-62 Storage of hazardous materials and wastes shall be strictly regulated.
- Policy 10-63 Secondary containment and periodic examination shall be required for all storage of toxic materials.
- Policy 10-68 When an emergency occurs in the transportation of hazardous materials, the County OES shall be notified as soon as possible.

Public Facilities/ Services Element – Hazardous Waste Management

- Goal 7-AM To eliminate the generation and disposal of hazardous waste materials to the maximum extent feasible by:
 - 1. Reducing the use of hazardous substances and the generation of hazardous wastes;
 - 2. Recovering and recycling the remaining waste for reuse;
 - 3. Treating those waste not amenable to source reduction or recycling so that the environment and community health are not threatened by their ultimate disposal;
 - 4. Incinerating those wastes amenable to this technology; and
 - 5. Properly disposing of residuals in approved residual repositories.
- Policy 7-116 The accelerated clean-up of contaminated sites, including containment of the sites as quickly as possible, shall be supported,

3.7.3 Impact Analysis

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(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

- 7 The Project would generate debris from the wharf, some of which may be hazardous.
- 8 Additionally, the use of hazardous materials during deconstruction would be required to
- 9 operate equipment. Such materials include, but are not limited to, the following: fuel
- 10 (diesel and gasoline); compressed gases for metal cutting; penetrating oil to lubricate
- 11 corroded fitting; and marking paint. Pre-deconstruction surveys indicate the presence of
- 12 LBP on wharf structures. Other residual materials suspected to be present at the

- 1 derelict wharf include creosote, miscellaneous oils, and mercury (from switches and
- 2 gauges).
- 3 Shore base activities would include routine transportation and use of hazardous
- 4 materials. All hazardous materials to be used on the barges at the Project site and
- 5 slated for removal would be staged at the shore base in the course of routine
- 6 transportation.
- 7 The routine transport, use, or disposal of hazardous materials mentioned above could
- 8 have a potentially significant impact to the public or the environment; however,
- 9 implementation of MM HAZ-1a and MM HAZ-1b, discussed below, would reduce
- 10 impacts to less than significant.
- 11 A California Hazardous Materials Business Plan consistent with requirements of the
- 12 California Fire Code would be prepared and included as part of the HMMP and
- implemented for the shore base. All hazardous materials and hazardous wastes to be
- 14 stored or used at the shore base would be identified and a record of the inventory
- 15 would be kept on site.
- 16 Impact HAZ-1: Routine transport, use, and disposal of hazardous materials
- 17 could create a significant hazard.
- 18 **Less than Significant with Mitigation.** The Project includes the routine transport, use,
- and disposal of hazardous materials that could create a significant hazard to the public
- 20 or environment. All deconstruction activities would be conducted in accordance with
- 21 approved plans. Measures would be taken to control hazardous materials during routine
- transport, use, and disposal. The following mitigation measures would reduce potential
- 23 impacts to less than significant.
- 24 MM HAZ-1a: Barge and Shore Base Hazardous Materials Inventory. The
- 25 Applicant shall keep a hazardous materials inventory for all hazardous materials to
- be stored, used, or transported for the Project in, on, or around the wharf, work
- barges, and the shore base. A current inventory shall be kept on site at all times and
- shall include the name of the material; the type, capacity, number and location of
- storage containers; type of hazard (pressure release, fire, explosion, asphyxiation,
- toxicity, bioaccumulation, etc.); and the maximum storage capacity at each location.
- 31 MM HAZ-1b: Hazardous Materials Management Plan (HMMP). An HMMP shall be
- 32 prepared and submitted for approval to the California State Lands Commission staff
- 2 weeks prior to the start of deconstruction activities and kept on site. The HMMP
- 34 shall include specific methods for control and containment of hazardous materials
- 35 identified in the hazardous material inventories from deconstruction through

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- disposal. Emergency contacts shall be listed for use in the event of a release of hazardous materials. The HMMP would include, but is not limited to, the following:
 - A hazardous materials inventory that identifies the type, location, estimated quantity and nature of each potentially hazardous material located at the wharf.
 - Equipment containing other hazardous materials, such as switches and gauges that contain mercury, shall be tagged prior to removal for special handling to prevent an inadvertent discharge on the deck surfaces or into Bay waters.
 - If hazardous materials are identified, a specialty abatement contractor shall be acquired to mitigate these issues in compliance with State and Federal regulations prior to the general deconstruction of the wharf.
 - Any hazardous materials brought to the project site, e.g., diesel oil or paints, will also be included in the HMMP.
 - b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
 - There is potential for accidental release of hazardous materials during deconstruction activities. These releases could occur during routine transport, use, or disposal of hazardous materials via leaking equipment or other accidental events. Additionally, debris or equipment containing hazardous materials could be accidentally dropped into waters of the Strait.
 - Petroleum, Oils, and Lubricants: Accidental releases of petroleum, oils, and lubricants from equipment during deconstruction activities may occur. Spill prevention and containment would be implemented as part of MM WQ-1 to reduce the risk of accidental spills. If a spill occurs, it would be contained and cleaned up immediately to the extent work can be accomplished safely.
 - Deconstruction Debris: As part of MM BIO-3, the Deconstruction and Seafloor Debris Removal Plan would address deconstruction debris recovery and a sea floor debris removal. The plan would be used to minimize the likelihood of debris loss. In the event of debris dropping into the water, it would be recovered and a post-deconstruction bathymetric survey would be conducted to ensure debris associated with the deconstruction process is removed. Removal of debris would remove the potential for release of hazardous materials from the debris.
 - Lead-Based Paint: As part of MM BIO-2 and MM HAZ-1a, since LBP has been found to be present at the wharf, Phillips 66 would acquire a specialty abatement contractor to appropriately remove or mitigate LBP prior to the general deconstruction of the wharf. An LBP Management Plan including health and

- safety procedures would be developed in accordance with applicable State and Federal regulations. Workers on site have the highest risk. To reduce impacts should a release occur; all personnel would be trained to work with these materials, proper personal protective equipment would be used, and engineering controls would be implemented to contain the materials.
- Pile Remnants: In areas where scour is not expected to occur, the general practice for pile removal in the San Francisco Bay Area is removal to at least 2 feet below the mud line. This is thought to be sufficient to ensure that the pile stubs remain buried within the sediments, and do not have the potential to protrude above the seafloor, posing a potential hazard to navigation (Cacchione 2008). Per MM HAZ-2, if the complete extraction of piles is not successful, they would be cut off to a minimum depth of 2 feet below the mud line. However, if piles are not completely extracted, a post-deconstruction bathymetric survey and bi-annual surveys would be required for 6 years after completion of deconstruction activities to document that scour is not occurring within the Project footprint and that piles embedded in the Carquinez Strait bottom have not become exposed by erosion.
- 18 Impact HAZ-2: Release of hazardous materials by the Project could create a significant hazard.
- Less than Significant with Mitigation. There is the potential for accidental spills and releases of hazardous materials during the Project that could create a significant hazard to the public or environment. All work would be done according to approved plans. Several measures would be taken to manage hazardous materials and contain potential spills. Implementation of MM HAZ-1a, MM HAZ-1b, MM WQ-1, MM BIO-2, MM BIO-3, and the following mitigation measure would reduce potential impacts to less than significant. Additionally, once the Project is complete, existing structures and debris potentially containing hazardous materials would have been removed from the Strait, preventing further potential contact with the public or the environment.
 - MM HAZ-2: Post Construction Surveys. If piles are not completely extracted, post-deconstruction bathymetric survey shall be conducted immediately following deconstruction and every 2 years, for 6 years after the completion of deconstruction activities, to document that scour is not occurring within the Project footprint and that piles embedded in the Carquinez Strait bottom have not become exposed by erosion. Survey reports shall be submitted to the California State Lands Commission staff within 30 days of completion to document compliance.
 - c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

- 1 **No Impact.** There are no existing or proposed schools within one-quarter mile of the
- 2 Project site.
- 3 d) Be located on a site which is included on a list of hazardous materials sites
- 4 compiled pursuant to Government Code section 65962.5 and, as a result, would it
- 5 create a significant hazard to the public or the environment?
- 6 **No Impact.** The Project site is not listed on the Cortese List (Gov. Code, § 65962.5);
- 7 therefore, deconstruction activities would not create a significant hazard to the public or
- 8 the environment.
- 9 e) For a project located within an airport land use plan or, where such a plan has
- 10 not been adopted, within two miles of a public airport or public use airport, would
- 11 the project result in a safety hazard for people residing or working in the project
- 12 *area?*
- No Impact. No airports are within 2 miles of the Project site.
- 14 f) For a project within the vicinity of a private airstrip, would the project result in
- a safety hazard for people residing or working in the project area?
- 16 **No Impact.** No private airstrips are within 2 miles of the Project site.
- 17 g) Impair implementation of or physically interfere with an adopted emergency
- 18 response plan or emergency evacuation plan?
- 19 **No Impact.** The Project would not interfere with an adopted emergency response plan
- 20 or emergency evacuation plan. Deconstruction would not obstruct any roadways, as
- 21 most activities related to the deconstruction would occur from barges within the waters.
- 22 Roads would only be used for work commutes by construction personnel or those
- 23 wishing to observe deconstruction activities (the Applicant, monitors, or agency
- representatives); transport of equipment, supplies, and materials to the shore base; and
- 25 transport of wastes and recovered materials away from the selected contractor's shore
- 26 base. There would be no permanent modifications to road alignments, amount of traffic,
- 27 or other changes to the environment that would interfere with an emergency response
- 28 plan. Therefore, no impact would occur.
- 29 h) Expose people or structures to a significant risk of loss, injury or death
- 30 involving wildland fires, including where wildlands are adjacent to urbanized
- 31 areas or where residences are intermixed with wildlands?
- 32 **No Impact.** Deconstruction activities would be performed from a barge; there would be
- 33 no risk of wildfire.

1 3.7.4 Mitigation Summary

- 2 Implementation of the following measures would reduce Project-related impacts related
- 3 to hazards and hazardous materials to less than significant.
- MM HAZ-1a: Barge and Shore Base Hazardous Materials Inventory;
- MM HAZ-1b: Hazardous Materials Management Plan (HMMP);
- MM HAZ-2: Post Construction Surveys;
- MM WQ-1: Water Quality Plan/Storm Water Pollution Prevention Plan;
- MM BIO-2: Lead-Based Paint (LBP) Management Plan; and
- MM BIO-3: Deconstruction and Seafloor Debris Removal Plan.